

Figure 1

HPLC of Dialyzed, Methanol-Soluble
Quillaja saponaria Molina Bark Extract

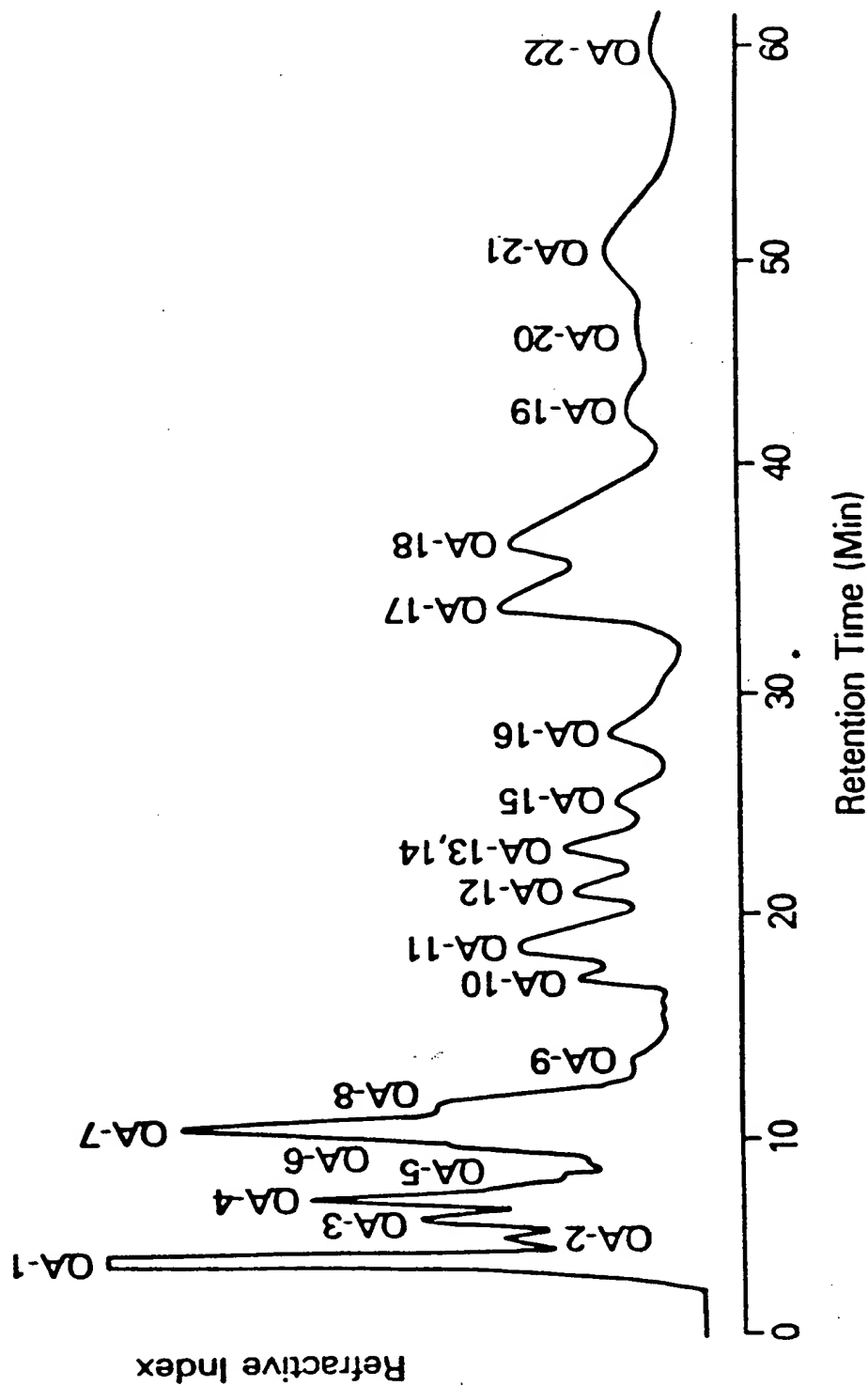


Figure 2

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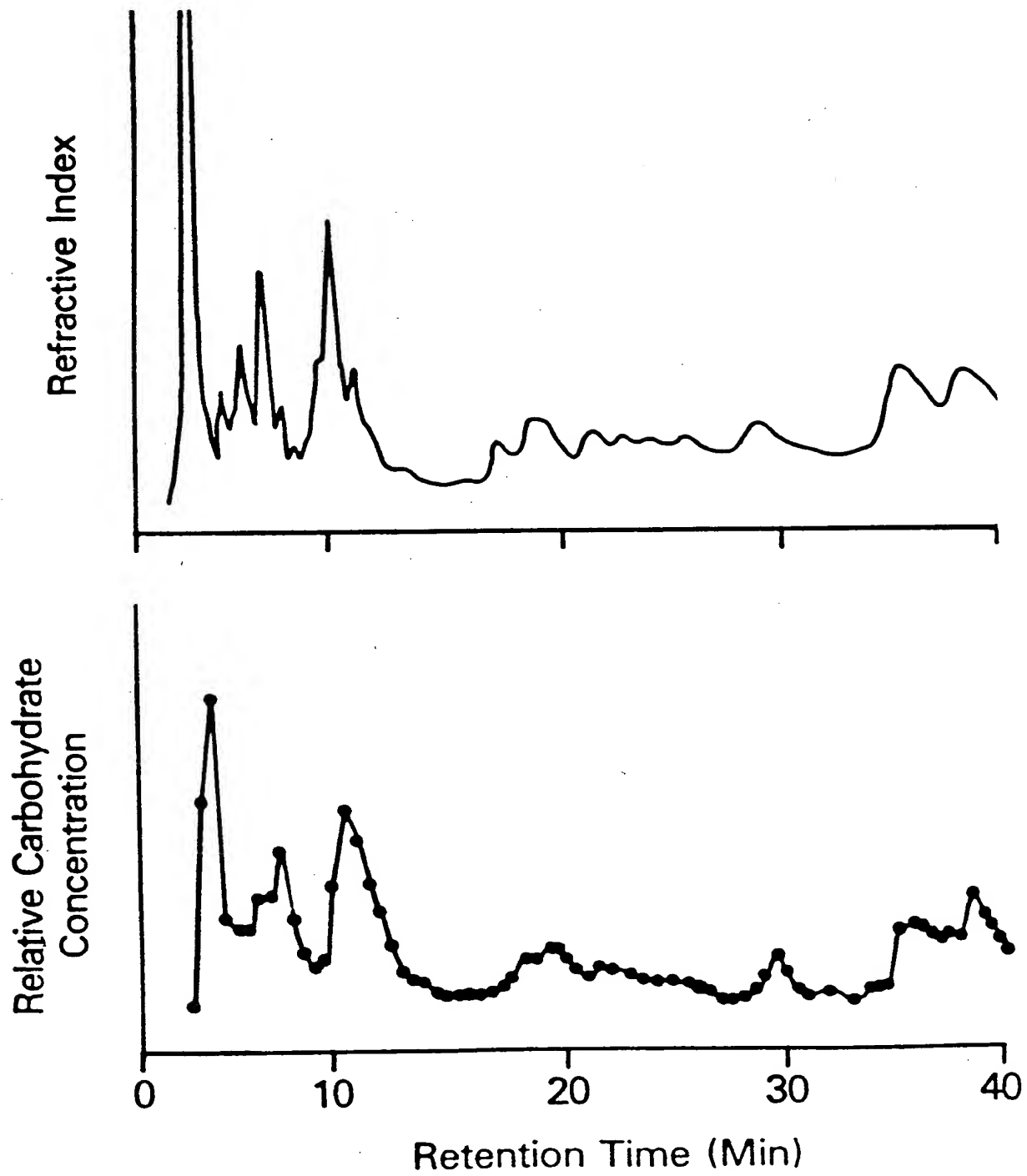
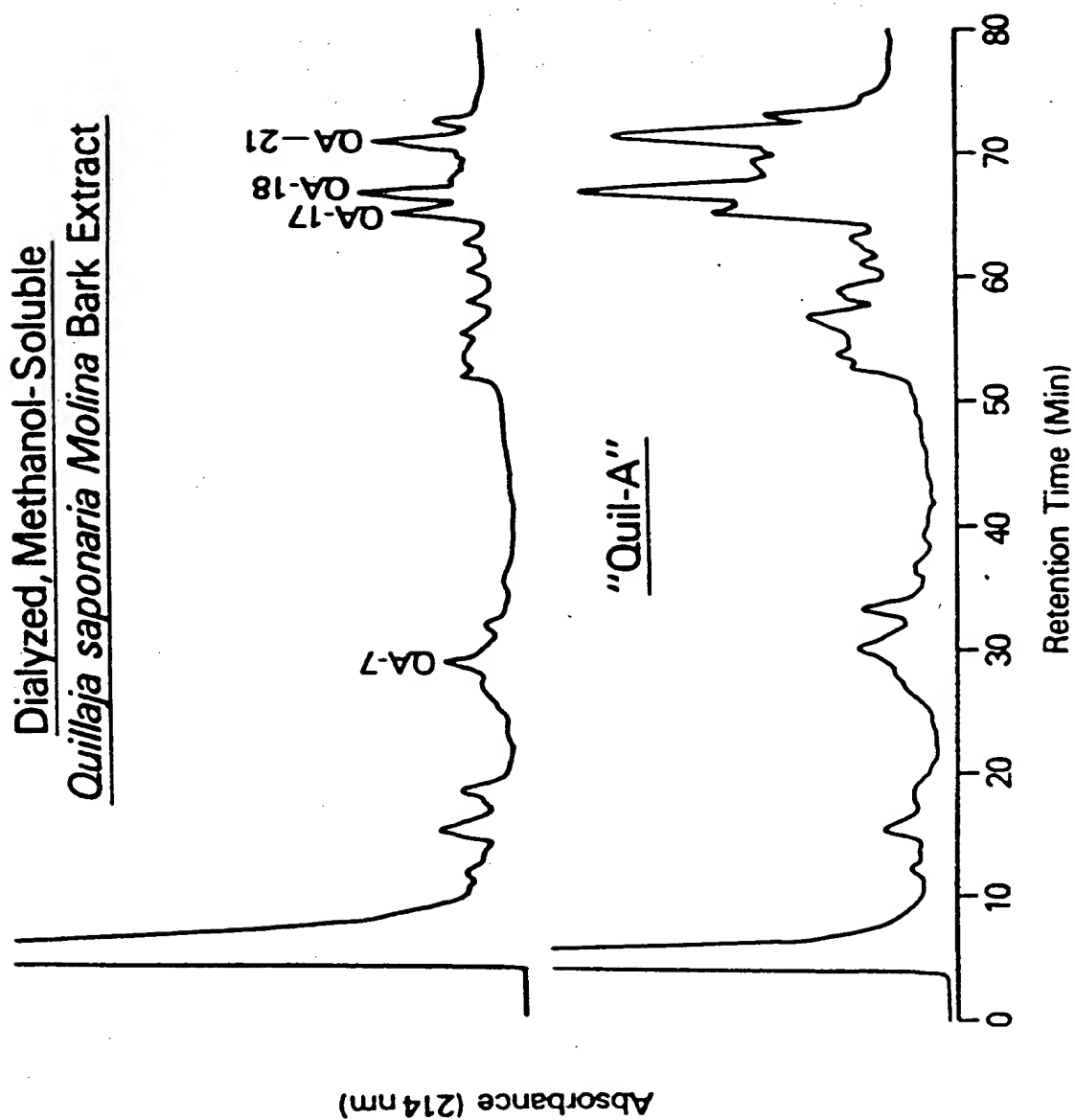


Figure 3



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Figure 4A

Silica Chromatography

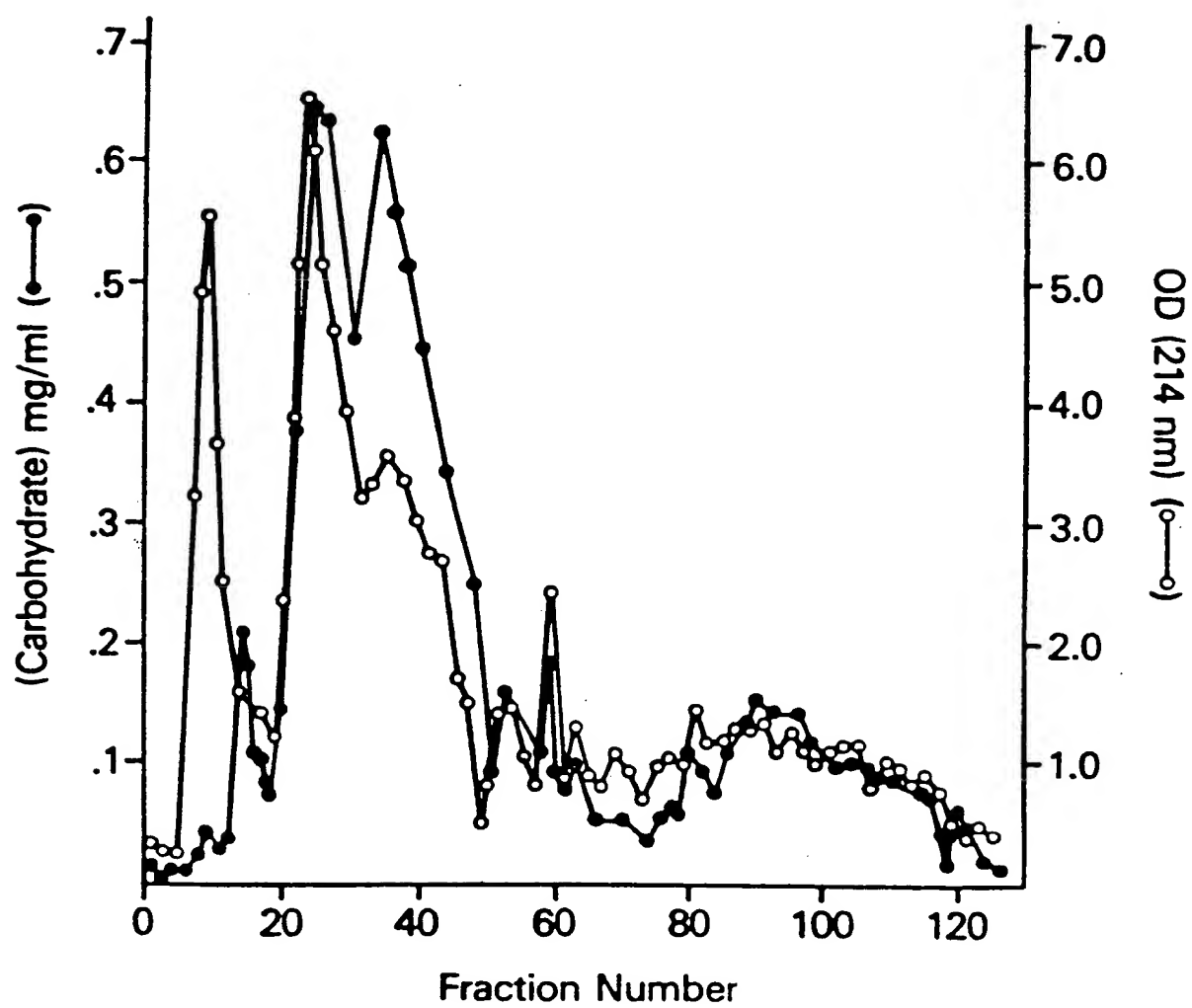


Figure 4B
HPLC Purification of QA-21

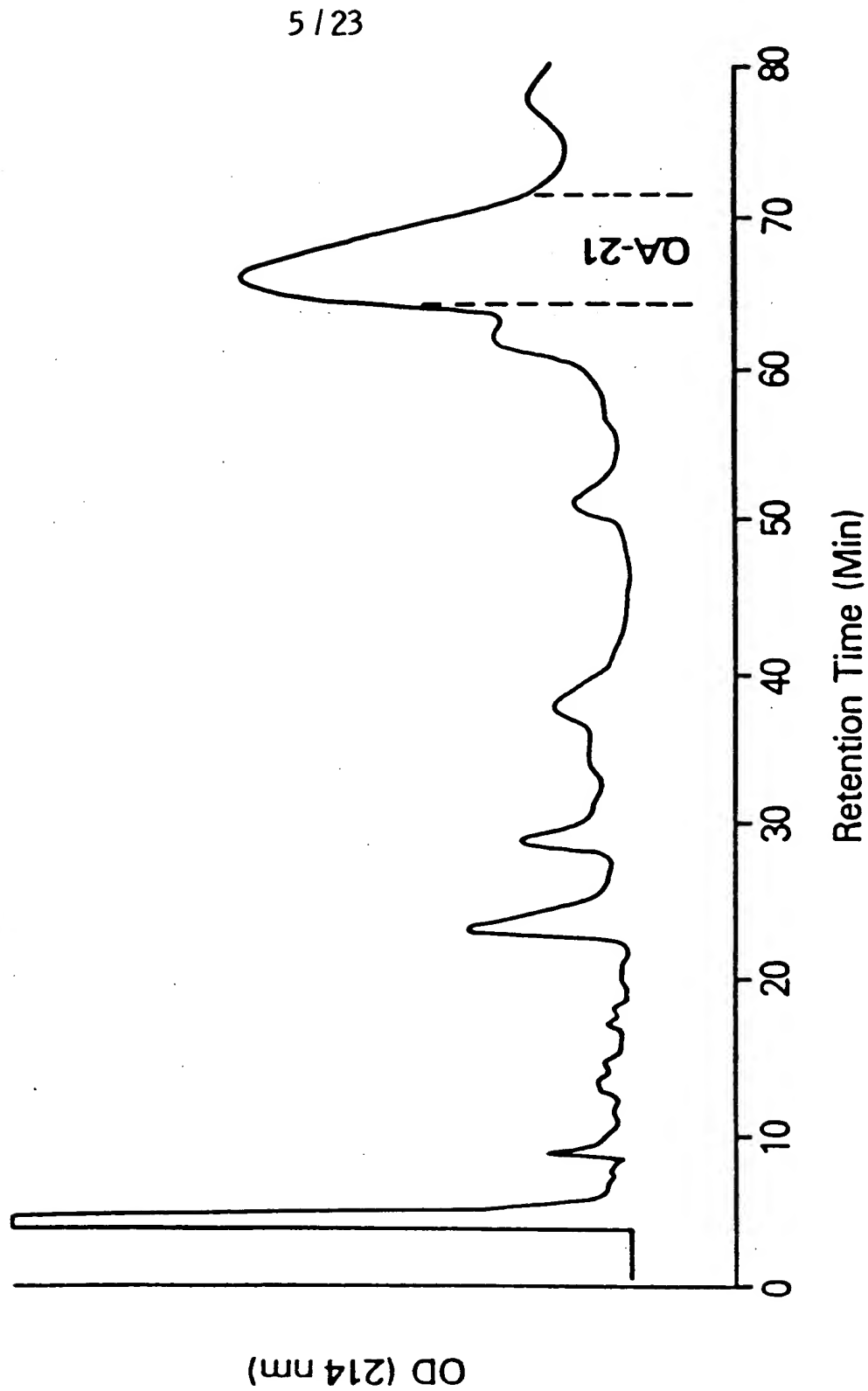


Figure 4C

HPLC Purification of QA-18 and QA-19

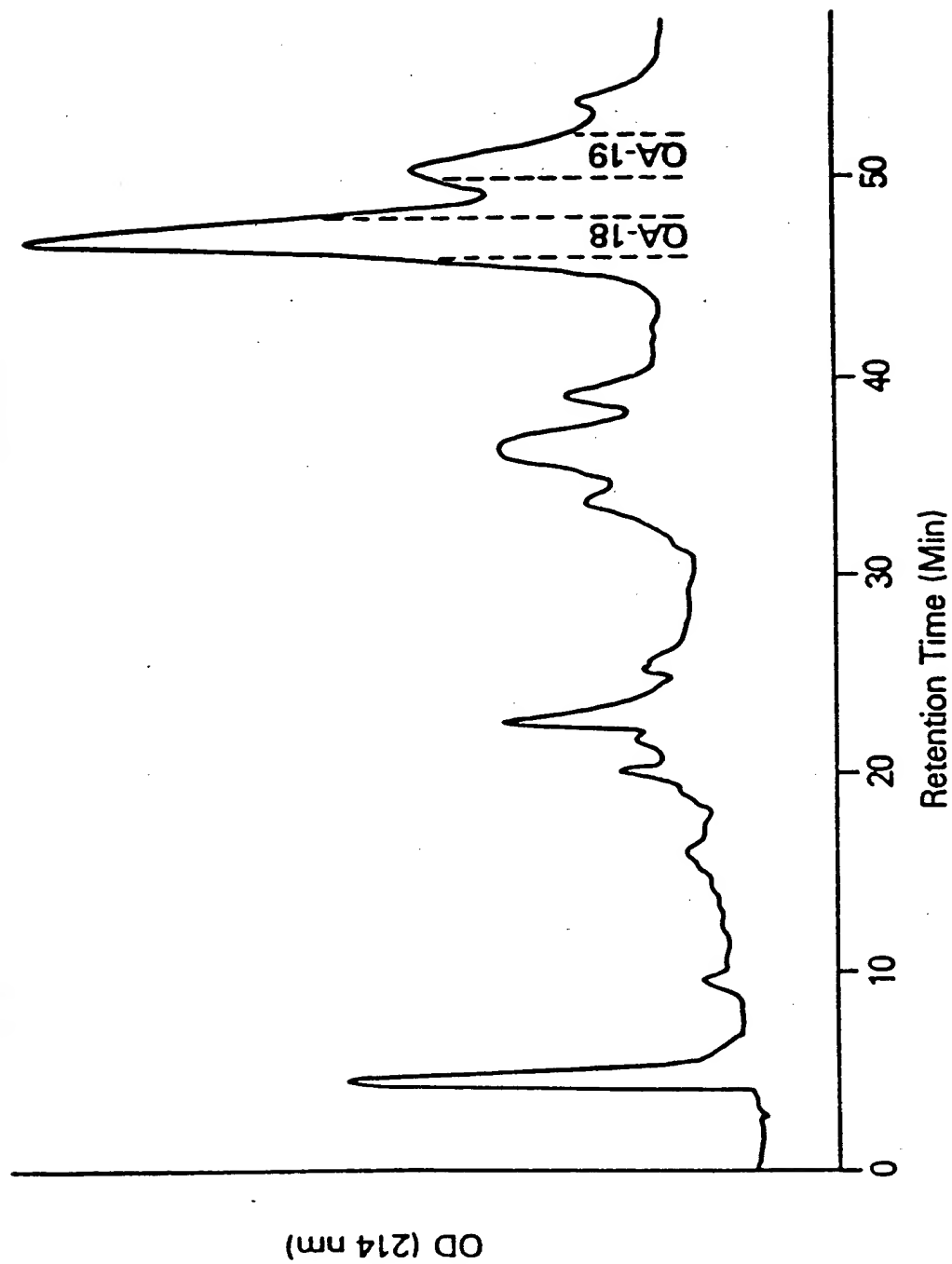
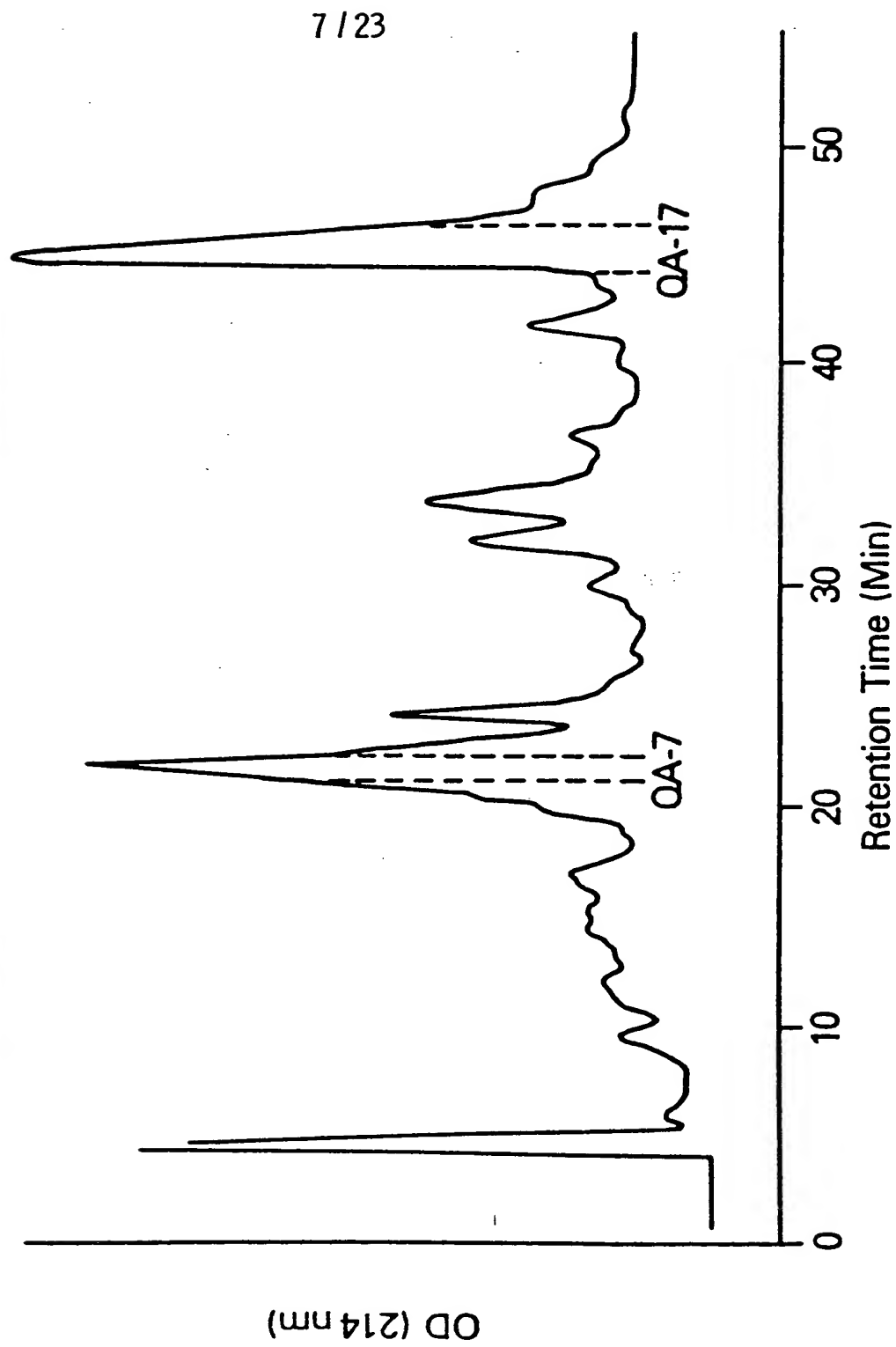


Figure 4D

HPLC Purification of QA-7 and QA-17



REVERSE PHASE TLC

QA-7
QA-17
QA-18
QA-21

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FIG. 5A

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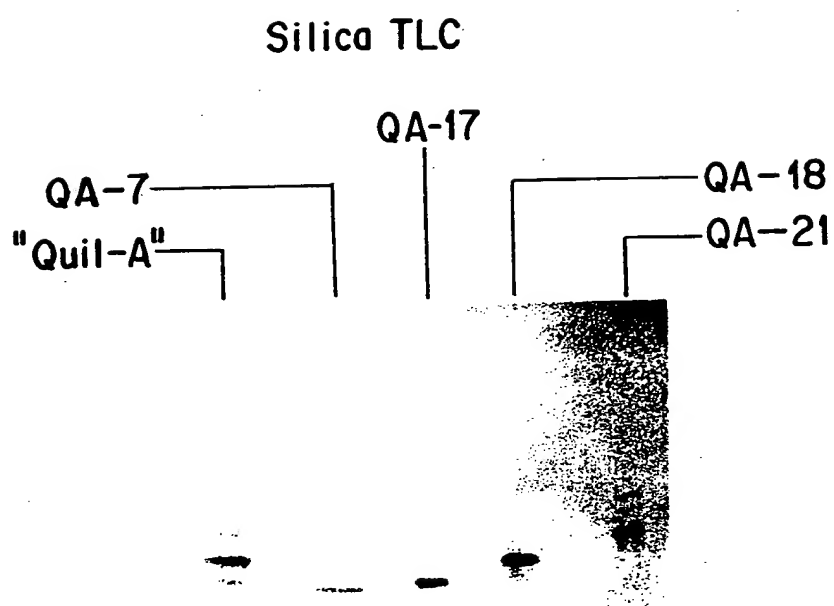


FIG. 5B

Figure 6

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UV Spectroscopy of Saponin Adjuvants

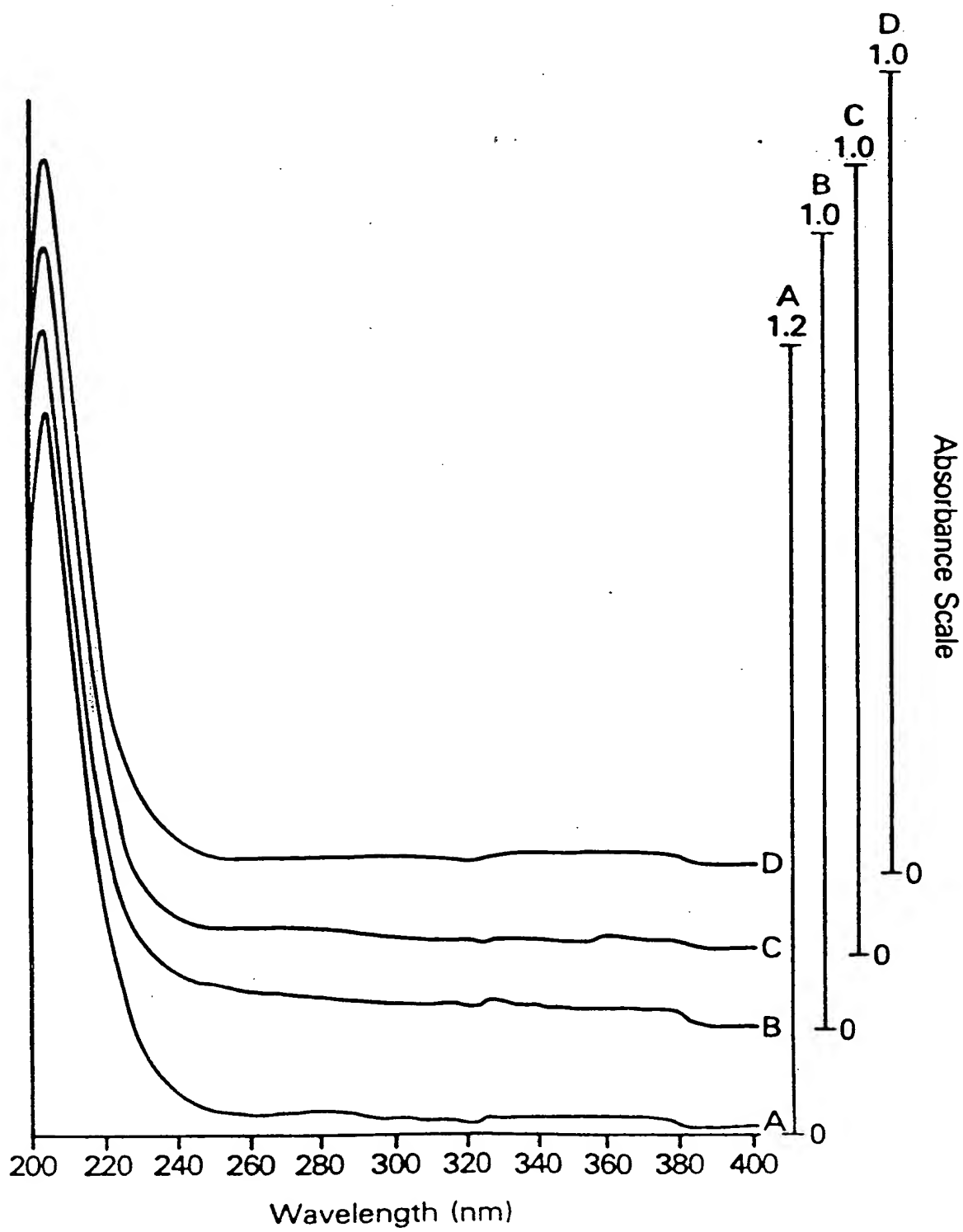


Figure 7A
¹H-NMR, QA-7

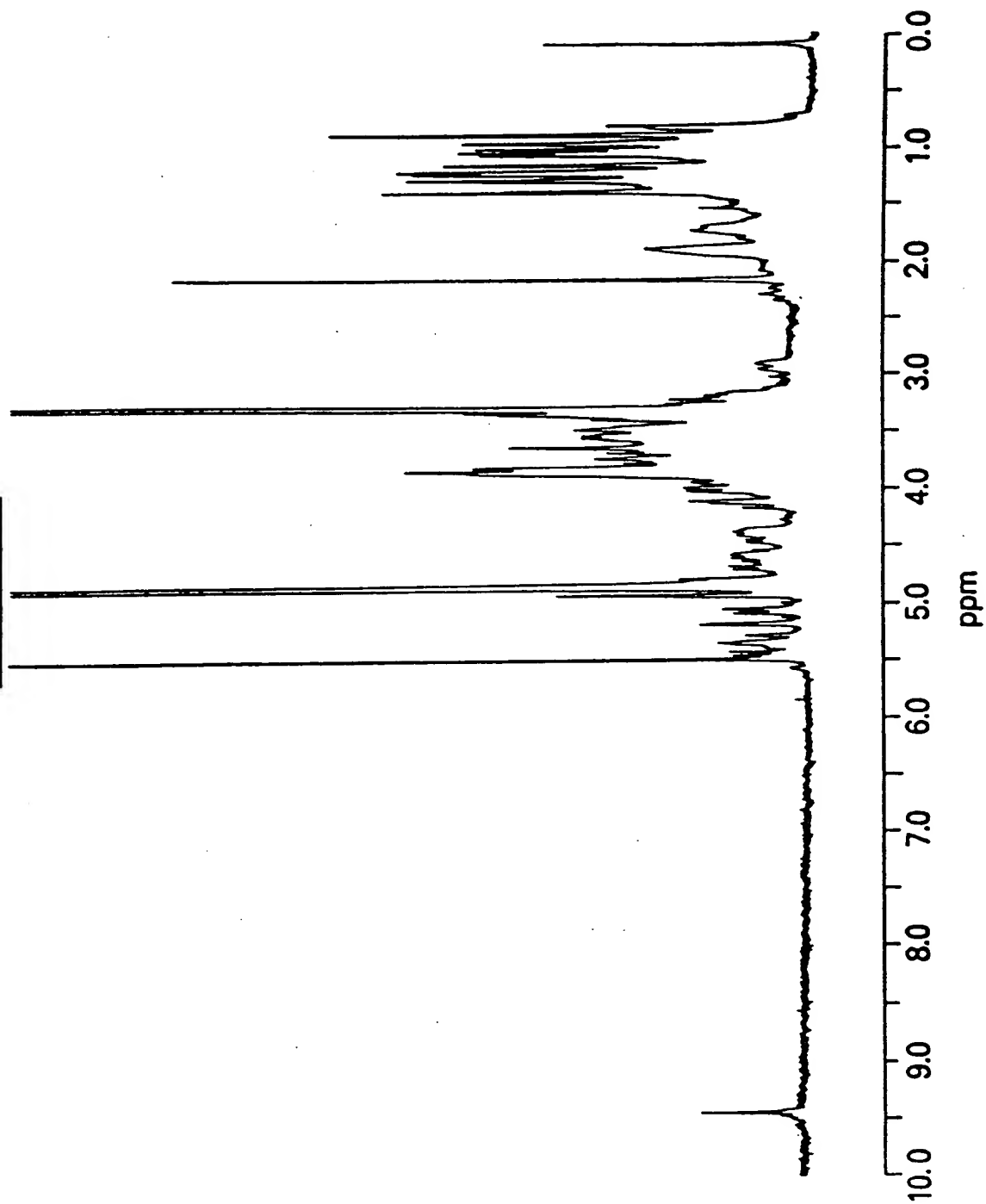


Figure 7B
 ^1H -NMR, OA-18

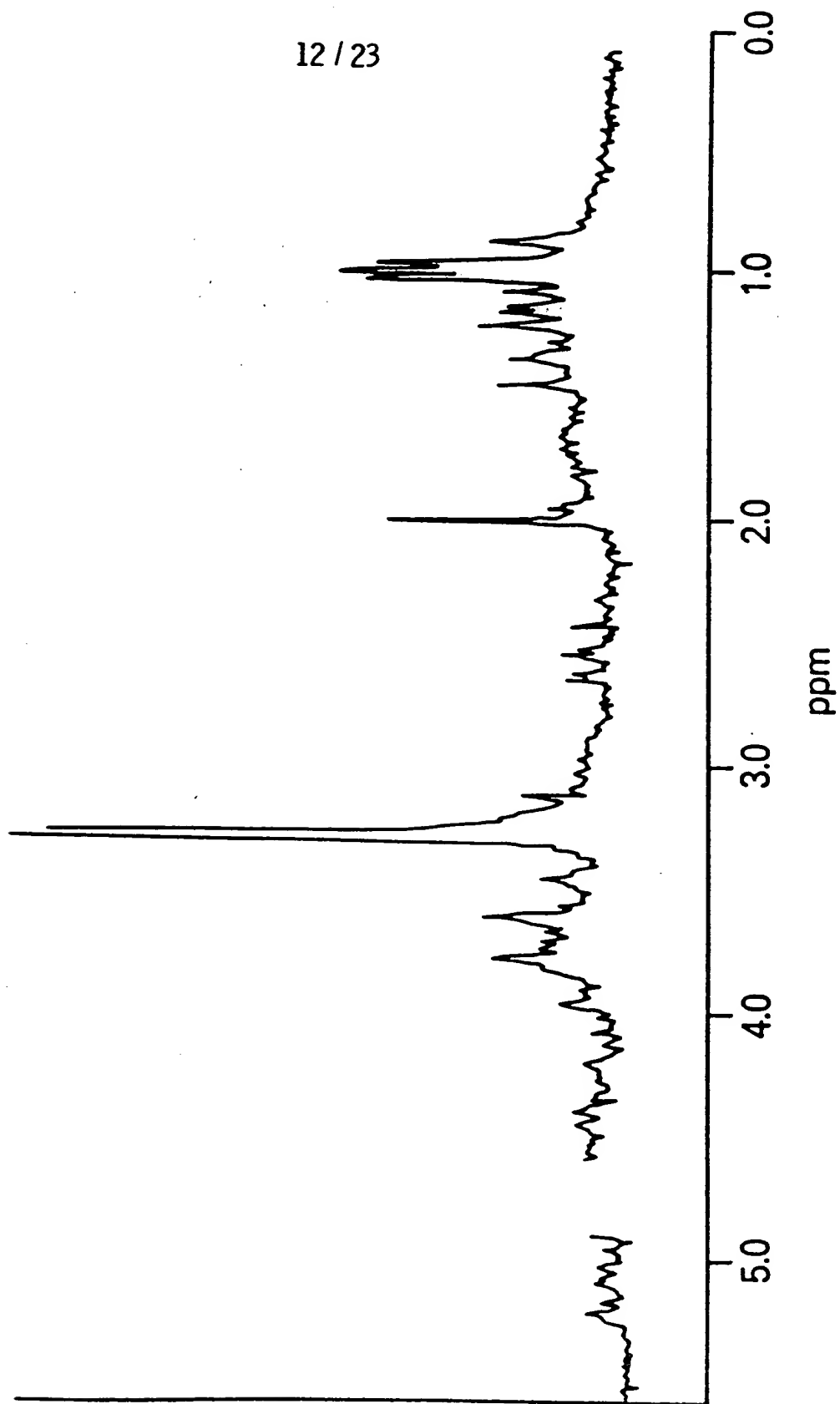


Figure 7C

¹H-NMR, OA-21

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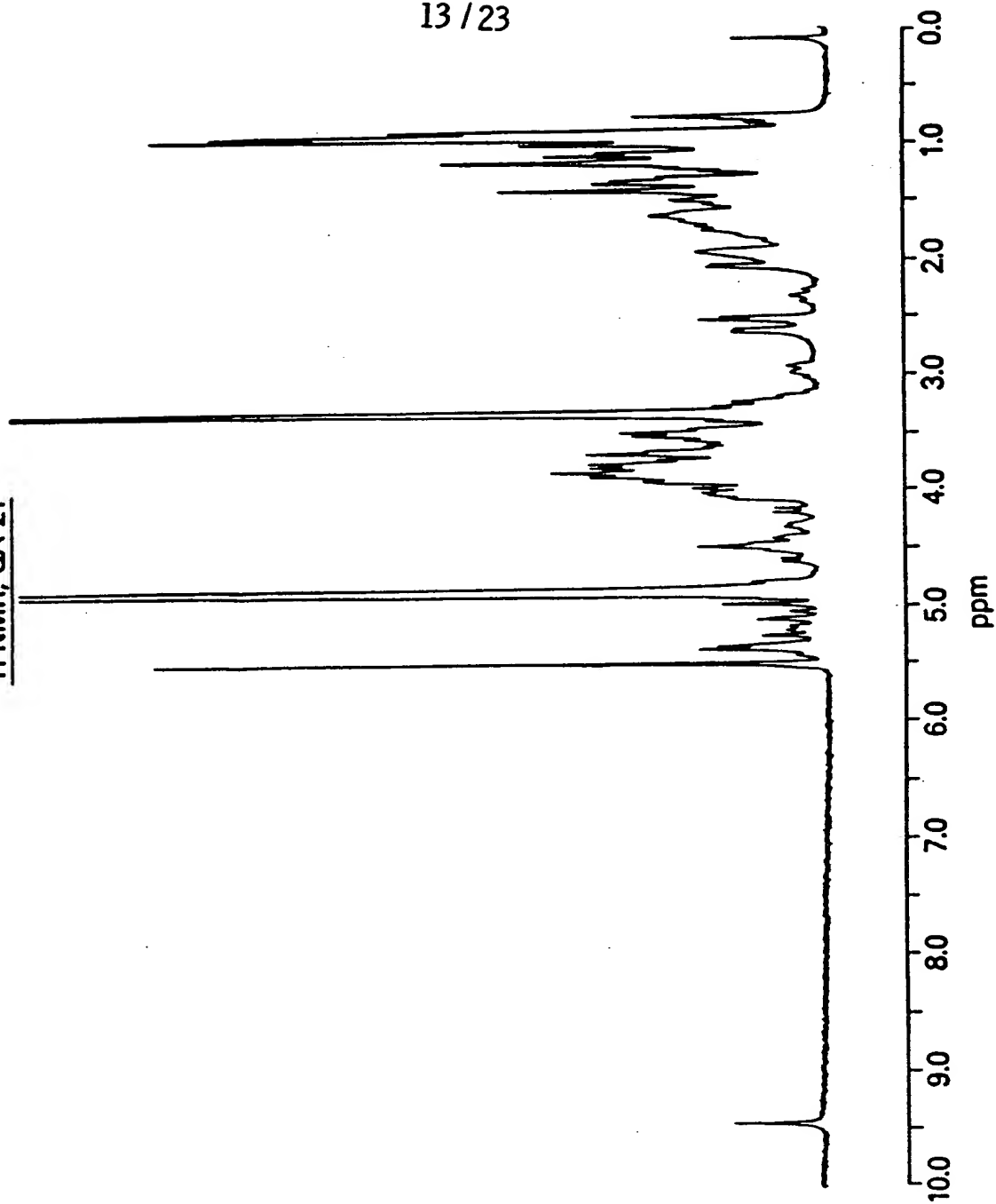


Figure 8A
FAB-MS, OA-7

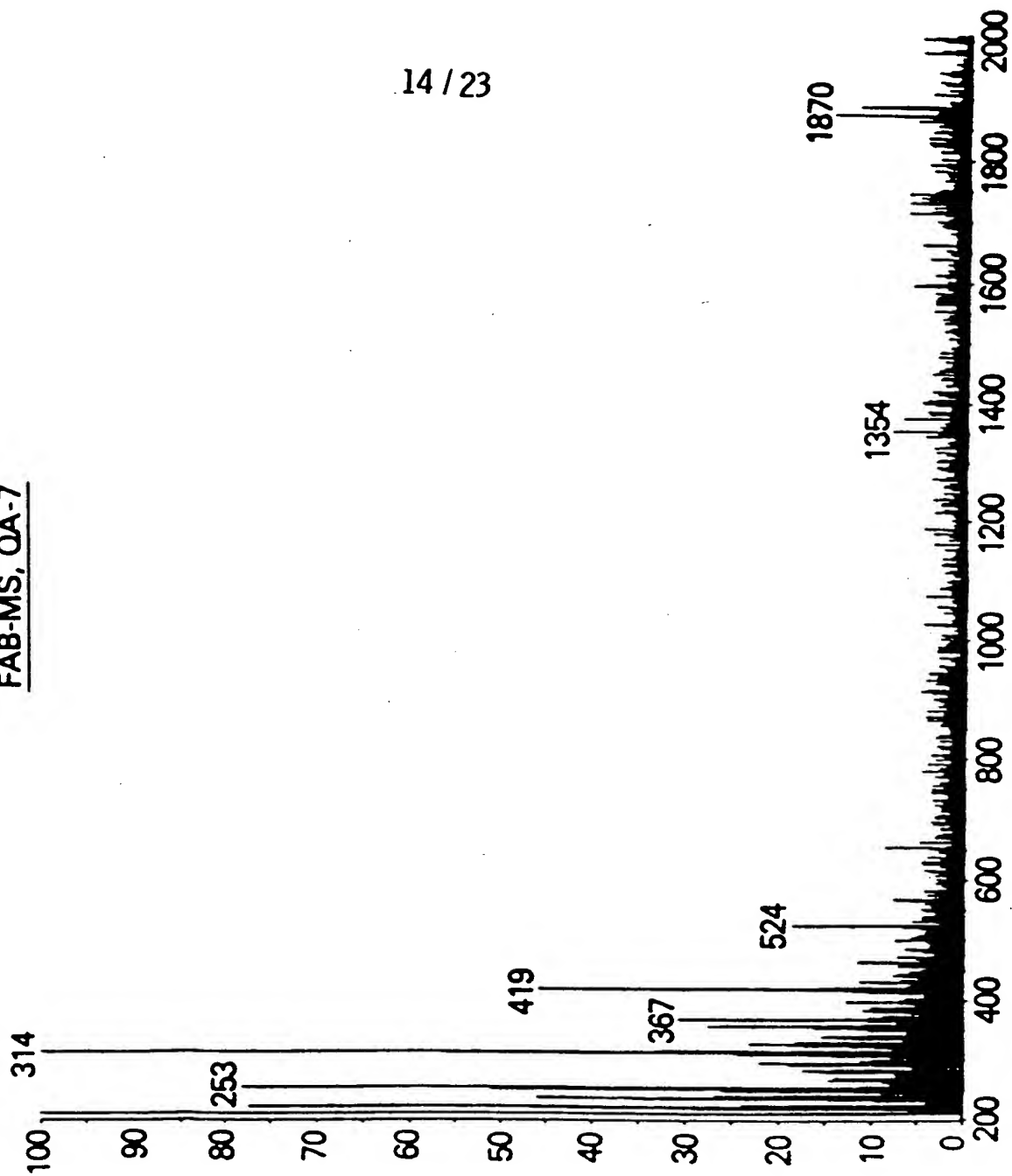


Figure 8B
FAB-MS, OA-17

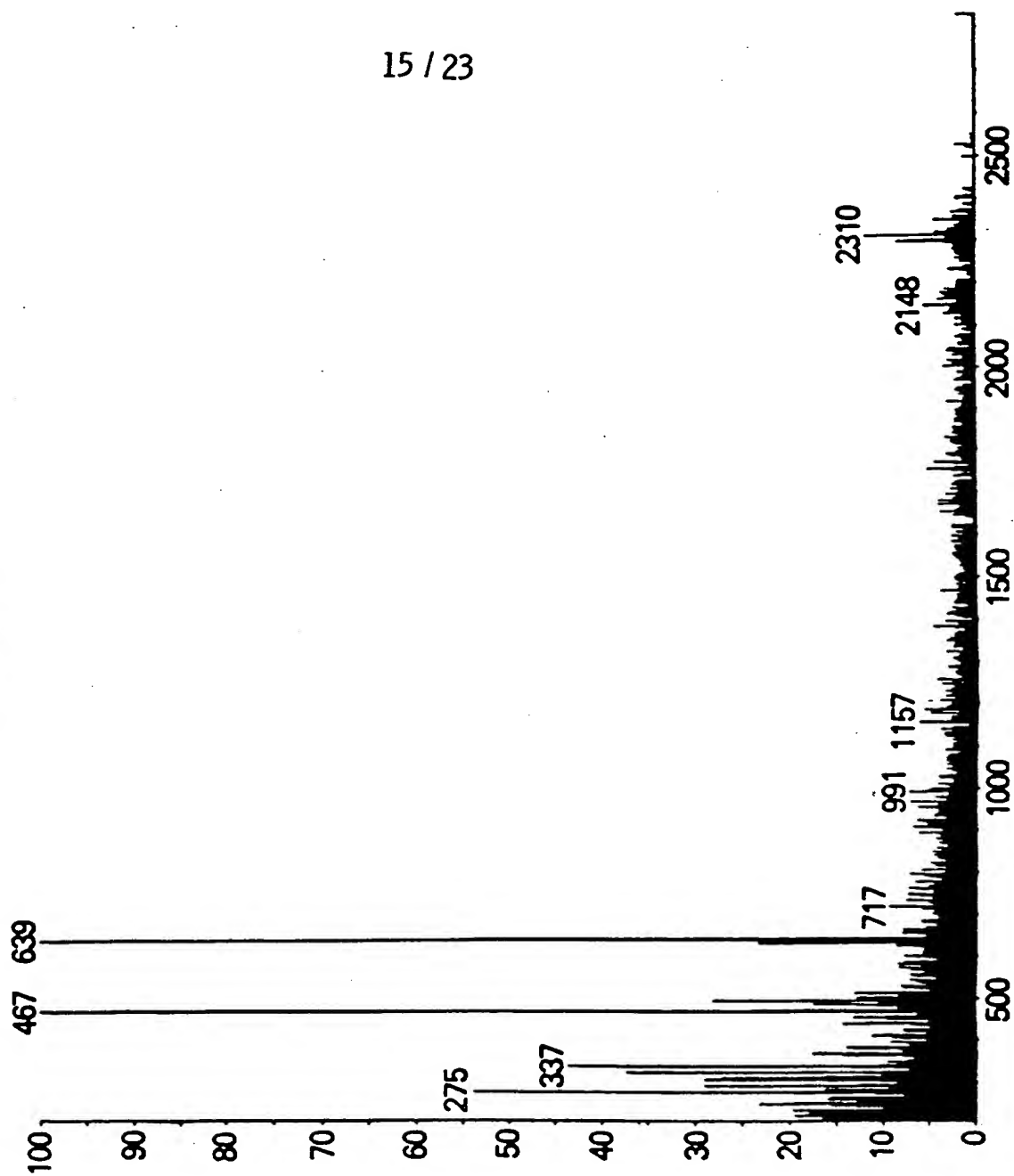


Figure 8C
FAB-MS, QA-21

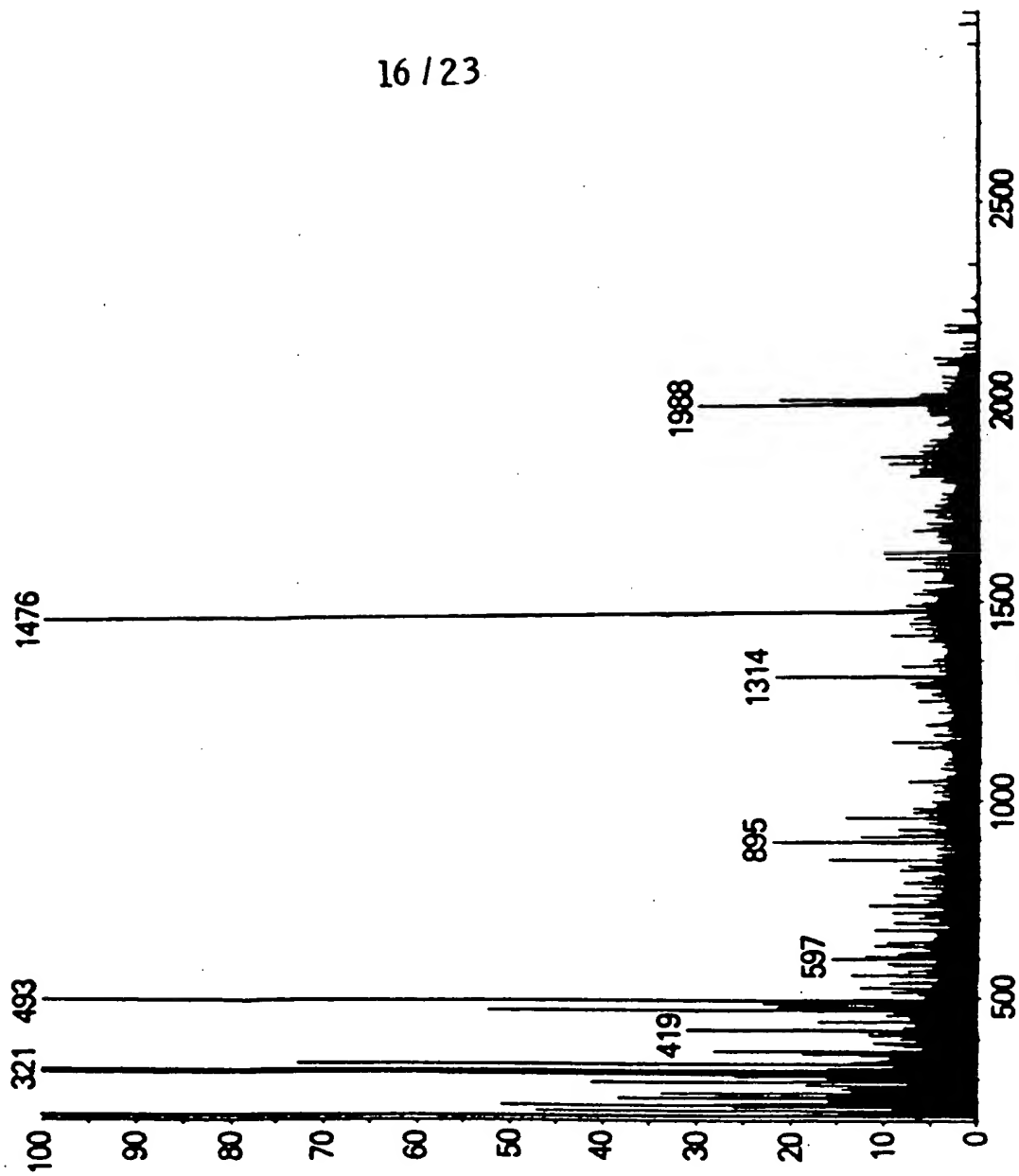


Figure 9

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Gel Filtration of Saponin Micelles

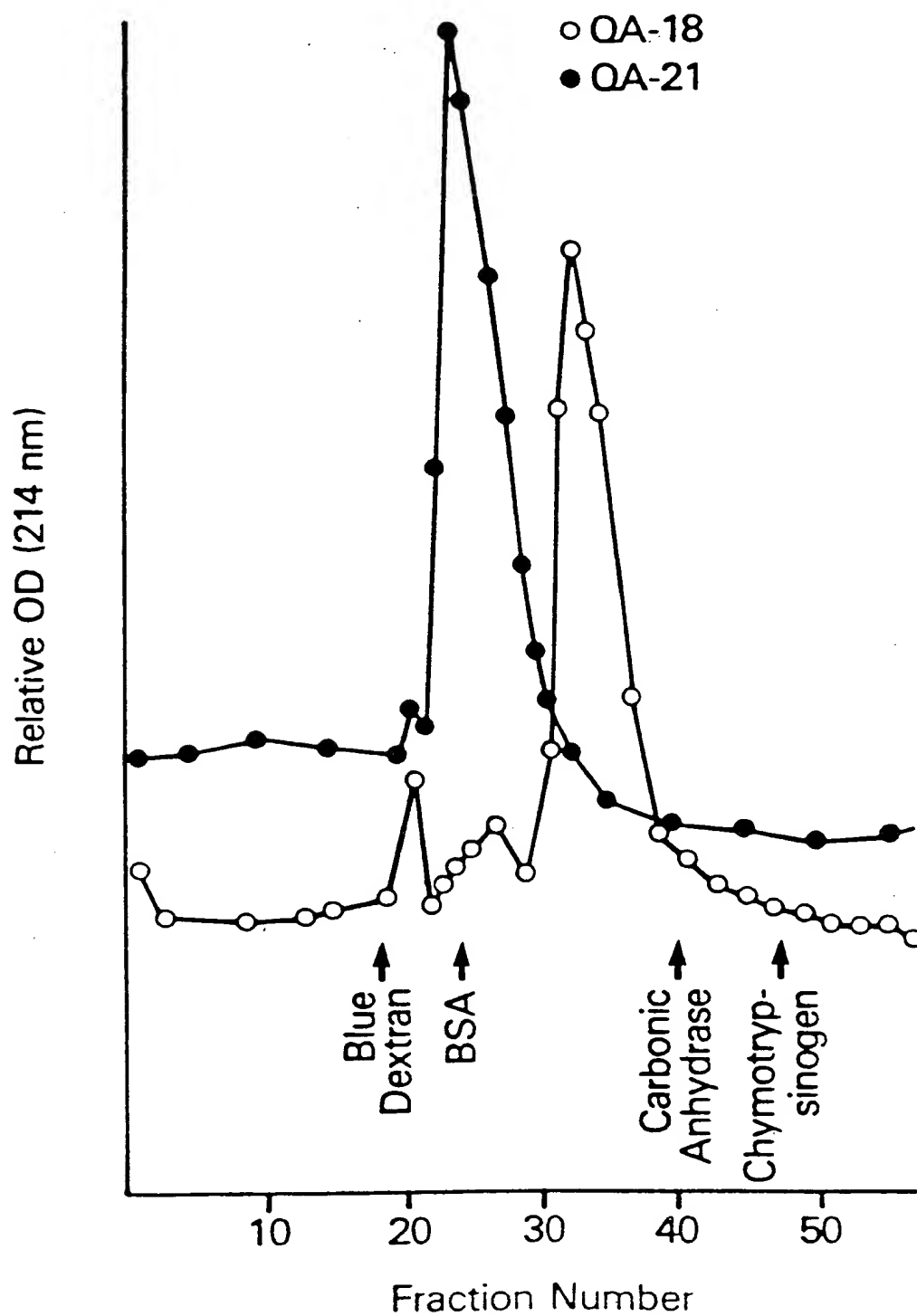


Figure 10

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Hemolysis of Sheep Red Blood Cells by Saponins

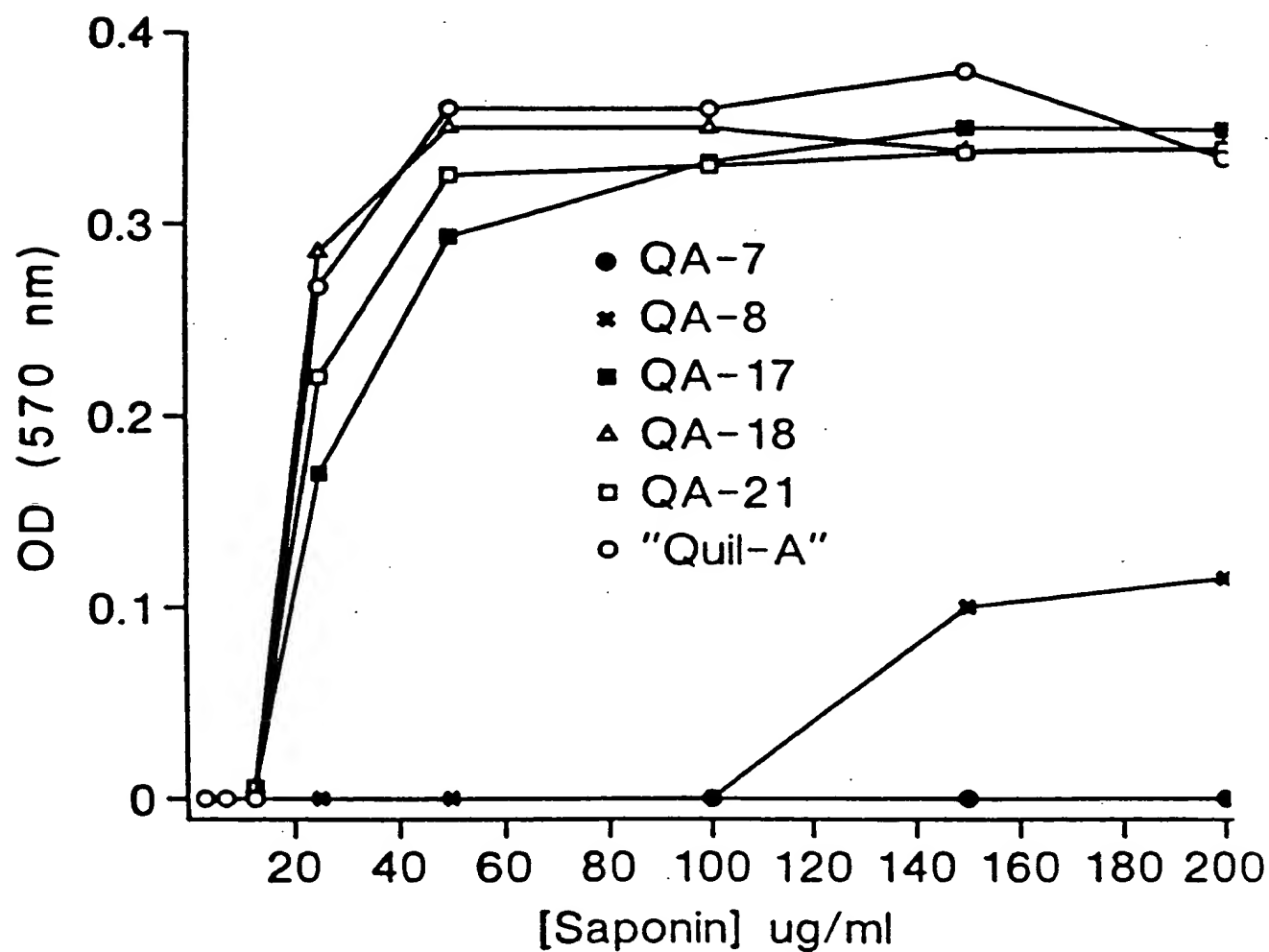


Figure 11

Anti-BSA ELISA

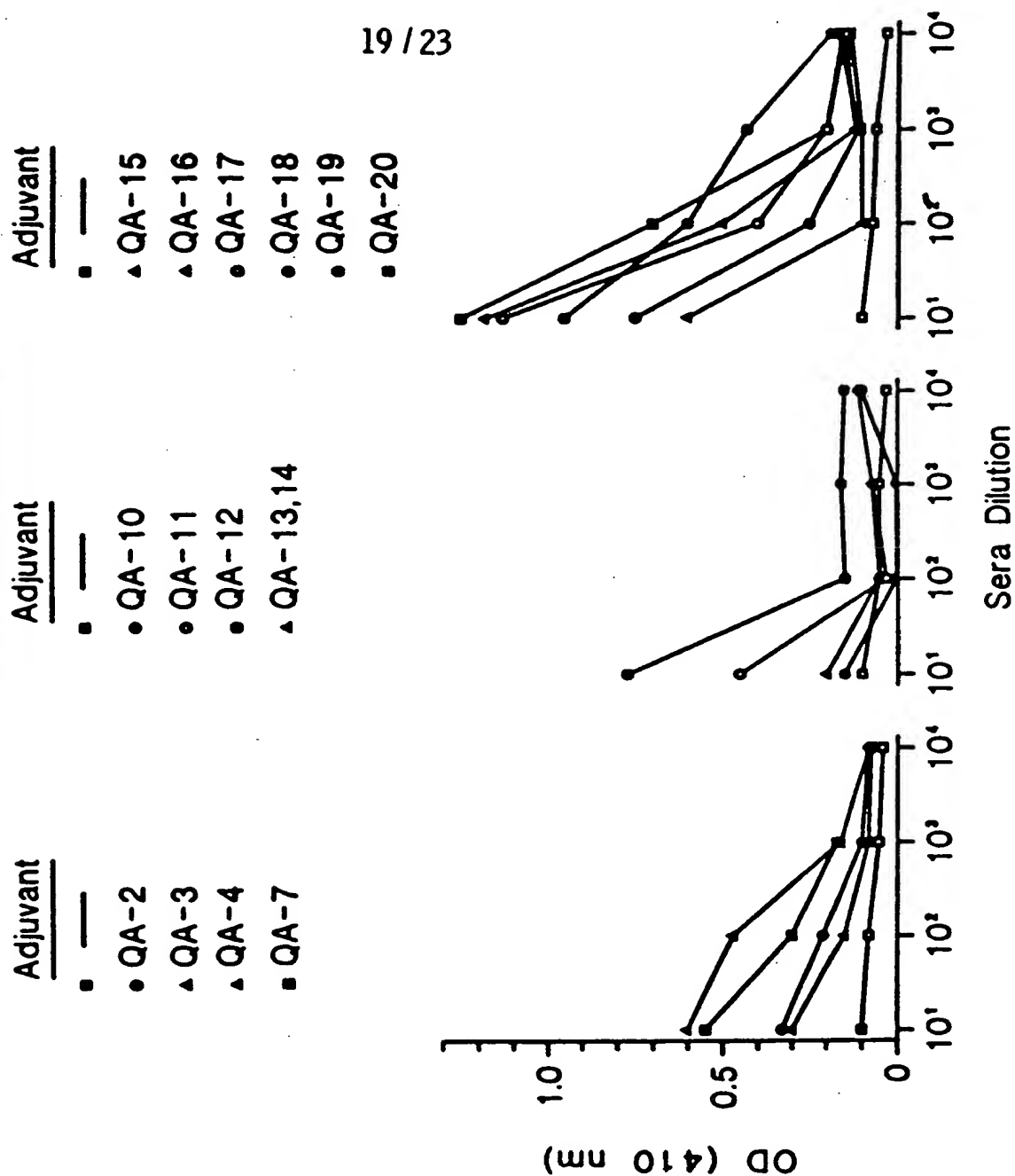


Figure 12

Anti-BSA ELISA

12A. Antigen = 15µg BSA 12B. Antigen = 30µg BSA 12C. Antigen = 45µg BSA

Adjuvant

- —
- QA-7
- ▲ QA-17
- ▲ QA-18
- QA-21
- Freund's Complete Adjuvant

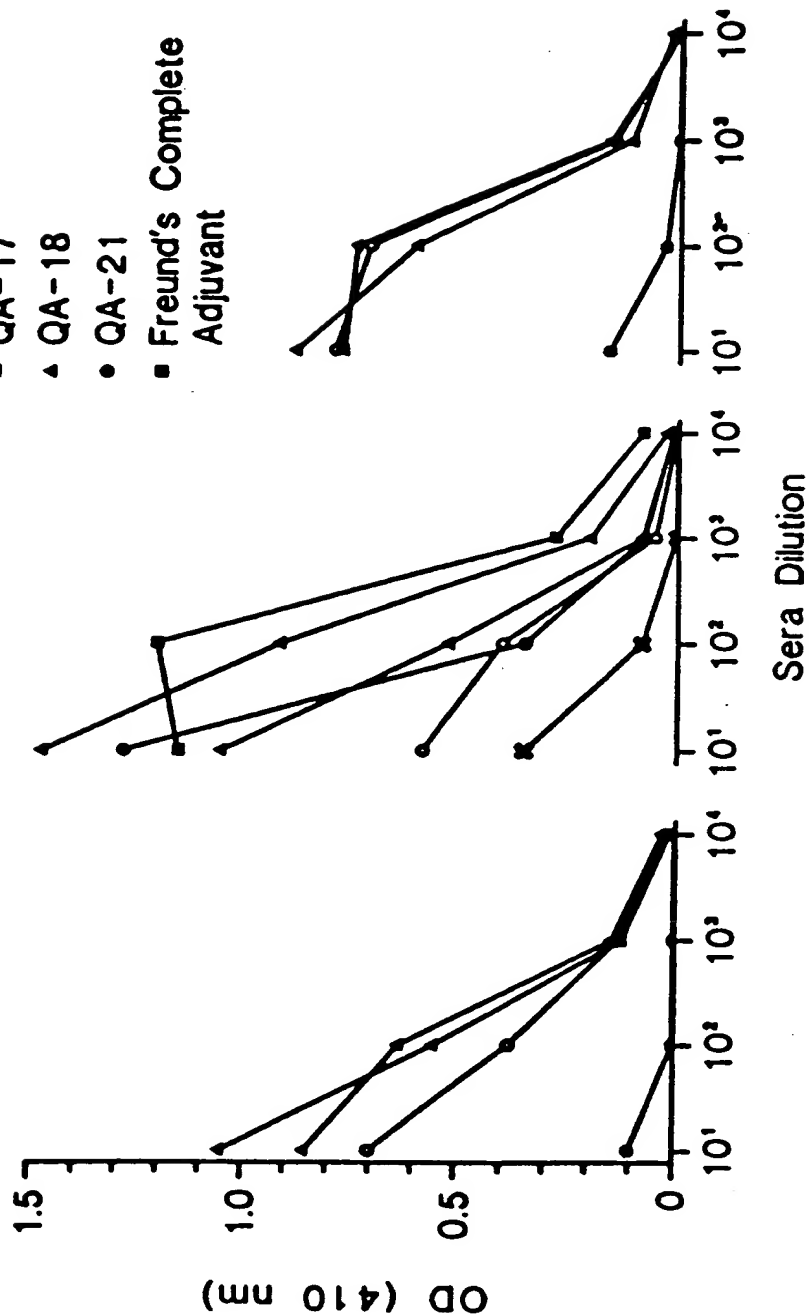


Figure 13

Anti-FelV ELISA

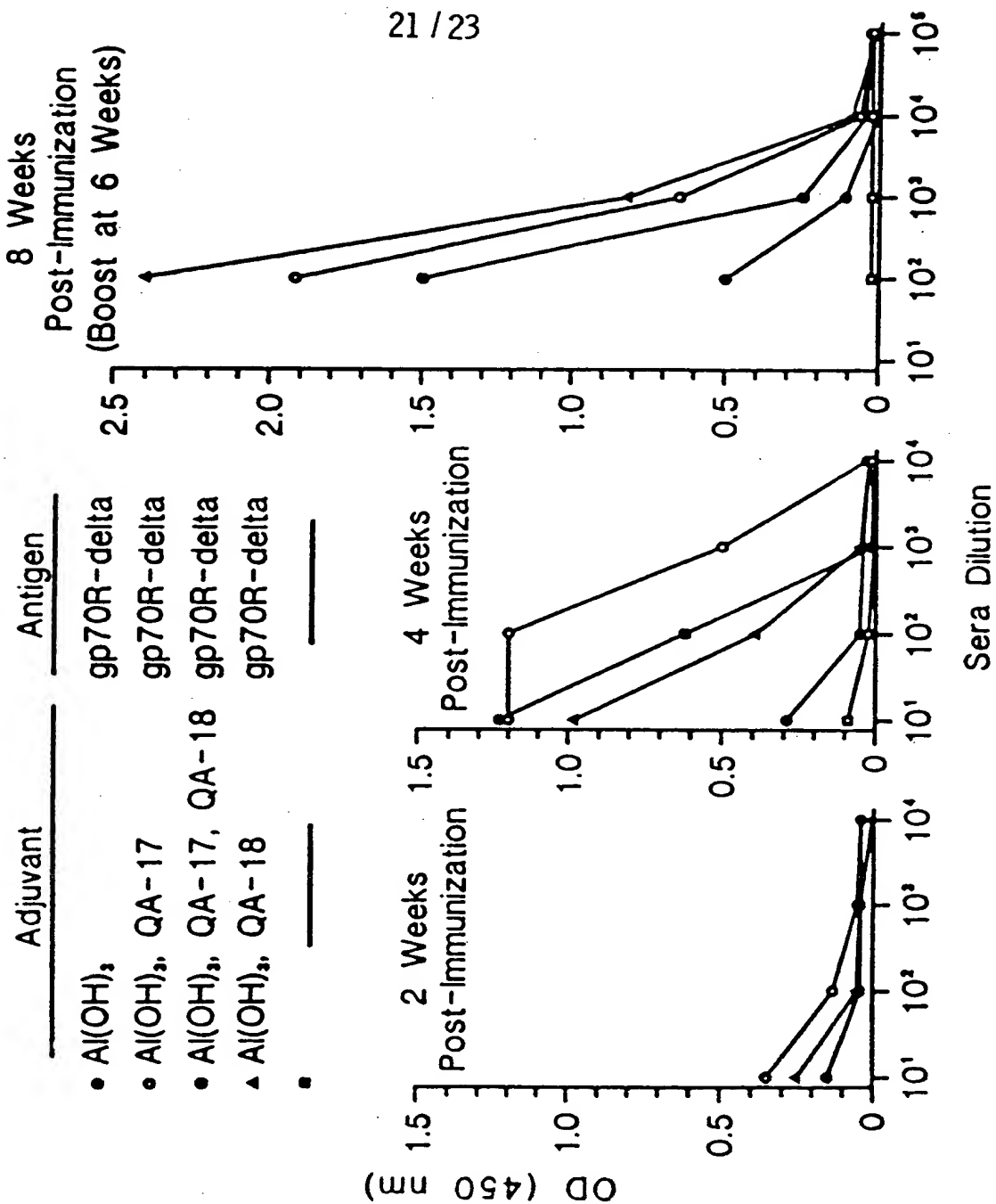


Figure 14

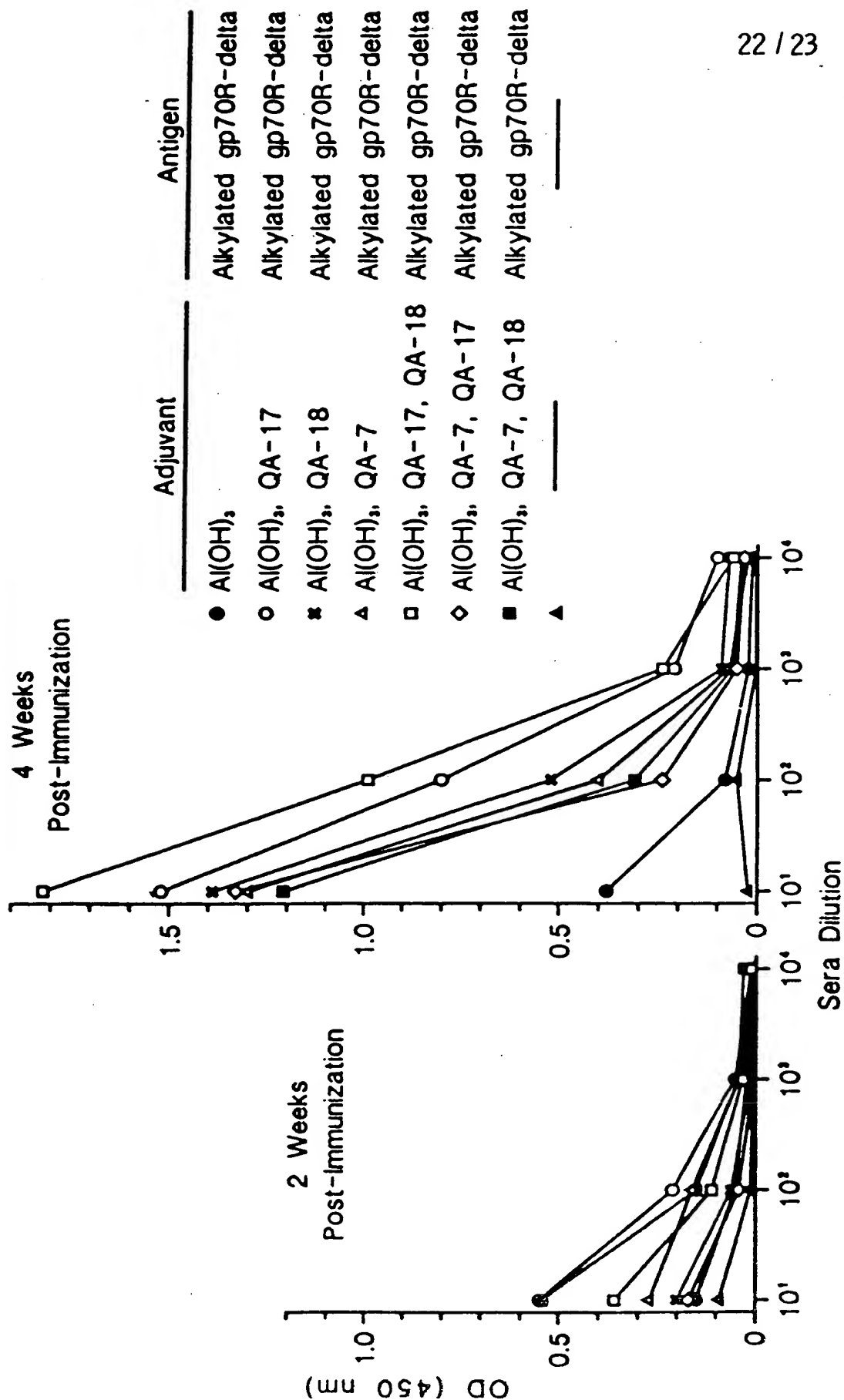
Anti-FelV ELISA

Figure 15
Anti-BSA ELISA

